

C L A I M S

1. A method of inspecting an electrical characteristic of a to-be-inspected object, comprising:

bringing pairs of probe pins into contact with
5 respective electrodes of at least one to-be-inspected object;

applying a voltage to the respective inspection electrodes via the pairs of probe pins by power supplies connected to the respective pairs of probe
10 pins, thereby causing a fritting phenomenon to occur between tips of each pair included in the pairs of probe pins; and

applying an inspection signal to the electrodes of the to-be-inspected object via the pairs of probe pins,
15 thereby inspecting an electrical characteristic of the to-be-inspected object.

2. The method according to claim 1, wherein:

the inspecting the electrical characteristic of the to-be-inspected object is performed by a
20 tester circuit, the tester circuit transmitting the inspection signal via respective electrical connection lines connecting the tester circuit to the respective probe pins included in the pairs of probe pins; and

the power supplies are formed of respective
25 drivers provided in the tester circuit, respective drivers applying a voltage to the respective electrodes via the electrical connection lines and the respective

pairs of probe pins.

3. The method according to claim 2, wherein the applying the voltage by the power supplies which is connected to the respective pairs of probe pins to the
5 respective electrodes via the respective pairs of probe pins includes one process included in a process of simultaneously applying the voltage to the electrodes, and a process of sequentially applying the voltage to the electrodes.

10 4. The method according to claim 3, wherein when the voltage applied by the power supplies to the respective electrodes reaches a predetermined limit value, when a current resulting from the voltage reaches a predetermined limit value, when the voltage
15 shows a predetermined change, or when the current shows a predetermined change, application of the voltage to the electrodes is stopped.

5. An apparatus for inspecting an electrical characteristic of a to-be-inspected object, comprising:
20 pairs of probe pins to be brought into contact with respective electrodes of at least one to-be-inspected object;

power supplies connected to the respective pairs of probe pins to apply a voltage to the respective
25 electrodes, a fritting phenomenon occurring between tips of each pair included in the pairs of probe pins, as a result of application of the voltage; and

a tester which transmits, after the fritting phenomenon occurs, an inspection signal to the electrodes of the to-be-inspected object, thereby inspecting an electrical characteristic of the to-be-inspected object.

6. The apparatus according to claim 5, further comprising:

a tester which transmits an inspection signal to the electrodes of the to-be-inspected object, thereby inspecting the electrical characteristic of the to-be-inspected object;

pairs of probe pins to be brought into contact with the respective electrodes;

electrical connection lines connecting the tester to the respective pairs of probe pins;

a plurality of drivers provided in the tester circuit, the drivers being connected to the respective pairs of probe pins to apply a voltage to the respective electrodes,

and wherein the electrical connection lines transmit the inspection signal from the tester and the voltage from the drivers to the respective electrodes of the to-be-inspected object.

7. The apparatus according to claim 6, further comprising:

switch mechanisms provided between the respective drivers and the respective pairs of probe pins, the

switch mechanisms being voltages witching mechanisms which enable one process included in a process of simultaneously applying the voltage to the electrodes, and a process of sequentially applying the voltage to the electrodes.

8. The apparatus according to claim 7, further comprising:

comparators connected between the respective drivers and the respective pairs of probe pins, the comparators detecting whether the voltage applied by the power supplies to the respective electrodes reaches a predetermined limit value,

and wherein when the comparators detect whether one of the voltage and a current reaches the predetermined limit value, the switch mechanisms stop application of the voltage to the probe pins by the drivers.